Woodbridge Creek Ecosystem Restoration Project Facts

he Woodbridge Creek Ecosystem Restoration site, located in Woodbridge, New Jersey, has been selected for complementary restoration efforts by the U.S. Army Corps of Engineers (Corps), the Port Authority of New York and New Jersey (Port Authority), together with the National Oceanic and Atmospheric Administration (NOAA), and the New Jersey Department of Environmental Protection (NJDEP) in cooperation with Woodbridge Township. This project is not designed to address flood control issues. However, the township of Woodbridge and the NJDEP are currently in discussion on how best to address the flooding issue in these areas.



Project Goals:

- Create and restore habitat for native nesting birds, nursing areas for juvenile fisheries
- Remove fill within wetland and regrade to allow for daily tidal flushing
- Restore hydrology of the site without adversely effecting flood levels
- Re-grade site and create an elevation range that is self sustaining for native salt marsh

As part of the Corps and Port Authority overall harbor deepening program, the Corps and the Port Authority will be restoring approximately 23 acres of tidal wetland and upland area at the Woodbridge site over the next year. This restoration work will offset unavoidable wetland impacts related to the deepening of navigation channels in the Port of New York and New Jersey

The NOAA/DEP restoration is being conducted to provide compensatory restoration for the 1991 Exxon Bayway Oil Spill. It will restore approximately 17 acres of tidal wetlands at the Woodbridge site.

The restoration projects are scheduled to begin the winter of 2005. The wetland areas selected for restoration have historically functioned as a salt marsh with freshwater influences and a diversity of characteristic vegetation. In recent years, the invasive form of *Phragmites australis*, or common reed, has overrun the site and, tidal influences have been reduced resulting in a loss of plant and animal diversity.









Pre-Construction Work:

The agencies collected information on the existing plant communities, the geotechnical and chemical properties of the soil, and water, as well as the hydrology, and cultural resources of the site. The results of this investigation provide an understanding of the site's historic and current conditions, which has aided in the development of the restoration design.

Cultural resources investigations, to date, have included historic research and site visits.

Research suggests that Dunham's Mill, a 1670 grist mill, stood in the project area until *circa* 1804, when a survey of the river described the mill as "pulled down." No excavations have taken place but timber remains of what might have been the mill dam were observed in the river bed. The timber remains will be mapped and a report detailing the history of the site will be prepared.

During the site investigations, chemical analyses of the soil to be excavated from the site were conducted and compared to state and federal standards for handling, reuse, and disposal of excavated materials. The results of the tests revealed that the soil could be reused on site within existing uplands. These upland areas will be landscaped to further enhance the habitat value of the site as well as buffer some of the sounds from nearby highways.

DID YOU KNOW?

Currently, the Corps and the Port Authority are deepening key shipping channels throughout the Port of New York and New Jersey to accommodate the safe and efficient navigation of ships calling at the port.

The Port of New York and New Jersey, which supports more than 230,000 jobs in the area, is the third largest port in the nation and the largest on the East Coast.

Restoring Natural Habitat

The Project calls for the planting of more than 366,000 low march and more than 12,000 high march plants to include:

- 366,000 Spartina alternifora (smooth cordgrass)
- •5,300 Distichlis spicata (spike grass) & Spartina patens (saltmeadow hay)

Material Being Removed:

•72,000 cubic yards of phragmites will be placed on site and used for upland creation.

Construction Activities:

Prior to the start of the construction, approved soil erosion and sediment control measures will be installed. During construction, to the extent possible, the use of local roads will be avoided. For this purpose, temporary timber mat haul roads will be constructed within the site. The excavated material will be loaded onto highway vehicles with watertight dump bodies and tailgates, and tarps placed over the excavated materials. The wheels of the highway vehicles will be pressure-washed before leaving the site.

All temporary pipeline crossings, haul roads, and stream crossings will be removed at the completion of the construction and the site will be prepared for planting.

In early spring, all disturbed areas will be replanted with native vegetation. The site will be monitored extensively for a minimum of three years to ensure successful restoration of the Woodbridge Creek Ecosystem.

For more information contact:

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